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10/806,427	03/23/2004	Hiroyuki Watanabe	04329.3284	2944
22852 7590 01/07/2009 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER	
			RIYAMI, ABDULLA A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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## **DETAILED ACTION**

1. This is in response to an amendment/response filed on 10/07/2008.

- 2. Claims 1, 3, 9, and 11 have been amended.
- 3. No claims have been added.
- 4. Claims 1, 3-9, and 11-12 remain pending in the application.

## Response to Arguments

5. Applicant's arguments with respect to claims 1, 3-9, and 11-12 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claims 1, 3-9, and 11-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Slovin (US 6144855) in view of Jansen (US 2005/0221846) further in view Chavez, Jr. et al. (US 5914668).

As per claim 1, Slovin discloses an information processing device performing a network connection via a wireless relay apparatus (see figure 1, station 10), the device comprising:

a finding unit configured to find the wireless relay apparatus (see figure 1, newcomer processing unit 160 and access point acquisition unit 130, column 1, lines 59-67, each wireless station includes an access point learner which is operative to maintain the table of information (signal strength, access point identifier, qos) and column 9, lines 45-60, the station listens for beacons and updates table if necessary);

a detector configured to detect identification information of the wireless relay apparatus found by the finding unit (see figure 1, newcomer processing unit 160 and access point acquisition unit 130, column 1, lines 59-67, each wireless station includes

an access point learner which is operative to maintain the table of information (signal strength, access point identifier, qos and column 5, lines 26-40, access point id including frequency table id and time stamp, access point quality of service, access point signal strength).

Slovin does not expressly disclose a counting unit configured to count a finding frequency of the wireless relay apparatus found by the finding unit.

Jansen discloses a counting unit configured to count a finding frequency of the wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122).

Slovin and Jansen are analogous art since they are from the same field of endeavor of wireless communications connections.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Jansen's technique of using a counting unit configured to count a finding frequency of the wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) in Slovin's mobile station (see figure 1, station 10) for wireless connection configurations.

The motivation to combine would have been to have a device, method and computer readable medium that selects an access point based on frequency usage

indicating how frequently the corresponding frequency has been used (see paragraph 17, lines 6-9, Jansen), along with access points radio signal strength, quality of service and time stamps.

Slovin discloses an access point selector (figure 1, block 150) and a storing unit which stores specific characters representing identification information of the found wireless relay apparatus (see column 5, lines 30-42, access point table stored in memory and figure 1, block 60) and Jansen discloses a mobile device with a display unit (see figures 1 and 2, man machine interface 45, display 44) that is in accordance with the finding frequency counted by the counting unit (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) and a storing unit (see paragraph 53, lines 4-7, memory for storing data and program instructions).

Slovin and Jansen do not expressly disclose a storing unit which stores specific image data indicating characters representing identification information of the found wireless relay apparatus and a displaying unit configured to display one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form.

Chavez, Jr. et al. discloses a storing unit which stores specific image data indicating characters representing identification information (see figure 5, base station selection, 501,502,503,504) of the found wireless relay apparatus (see figure 2, wireless

terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) and a displaying unit configured to display one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form (see figure 5, base station selection, 501,502,503,504, column 4, lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength).

Slovin, Jansen, and Chavez, Jr. are analogous art since they are from the same field of endeavor of wireless communications connection configurations.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Chavez, Jr. et al.'s storing unit which stores specific image data indicating characters representing identification information (see figure 5, base station selection, 501,502,503,504) of the found wireless relay apparatus (see figure 2, wireless terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) and a displaying unit configured to display one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form (see figure 5, base station selection, 501,502,503,504, column 4, lines 56-

66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength) in Jansen's technique of using a counting unit configured to count a finding frequency of the wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) and display unit (see figures 1 and 2, man machine interface 45, display 44) in Slovin's mobile station (see figure 1, station 10) having an access point selector (figure 1, block 150) and a storing unit which stores specific characters representing identification information of the found wireless relay apparatus (see column 5, lines 30-42, access point table stored in memory and figure 1, block 60) for wireless connection configurations.

The motivation to combine would have been to have a device, method and computer readable medium wherein a user has full control over the mobility operational parameters and be able to specify these parameters (see column 2, lines 10-12, Chavez).

As per claim 3, Chavez JR discloses the storing unit storing specific image data indicating characters (see figure 2, wireless terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) corresponding identification information of the wireless relay apparatuses (column 4,

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lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength).

As per claim 4, Slovin discloses the storing unit stores peculiar icons or character message (see figure 1, table 60).

As per claim 5, Slovin discloses the displaying unit acquires service information or advertisement information for the wireless relay apparatus found by the finding unit and displays the acquired information (see beacon, column 9, lines 46-60, access point acquisition unit 130 performs search for new access points).

As per claim 6, Slovin discloses judging a condition associated with the wireless relay apparatus found and displaying changes to the information based on the judged condition (see figure 1, see column 9, lines 46-60, periodic updates based on receiving beacons).

As per claim 7, Slovin discloses the displaying unit displays selectable information in accordance with the identification information characterized according to identification information on the found wireless relay apparatus, and sets connection environment using the wireless relay apparatus found by the finding unit when the corresponding information is selected (see figure 1, table 60, access point information table with quality of service, signal strength, timestamp etc.).

As per claim 8, Slovin discloses the acquiring unit (figure 1, block 130, column 9, lines 46-60, access point acquisition unit 130 performs search for new access points) configured to acquire a database associating each identification information of the wireless relay apparatuses which can be found by the finding unit the with information

displayed by the displaying unit from an external apparatus which is connected with the network through the finding unit (see figure 1, frequency table memory).

As per claim 9, Slovin discloses a computer-readable medium for use on a network- connectable device through a wireless relay apparatus, the computer-readable medium having computer-executable instructions for performing a method (see figure 1, station 10) comprising:

finding the wireless relay apparatus (see figure 1, newcomer processing unit 160 and access point acquisition unit 130, column 1, lines 59-67, each wireless station includes an access point learner which is operative to maintain the table of information (signal strength, access point identifier, qos) and column 9, lines 45-60, the station listens for beacons and updates table if necessary);

detecting identification information of the found wireless relay apparatus (see figure 1, newcomer processing unit 160 and access point acquisition unit 130, column 1, lines 59-67, each wireless station includes an access point learner which is operative to maintain the table of information (signal strength, access point identifier, qos and column 5, lines 26-40, access point id including frequency table id and time stamp, access point quality of service, access point signal strength).

Slovin does not expressly disclose counting a finding frequency of the found wireless relay apparatus.

Jansen discloses counting a finding frequency of the found wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the

corresponding frequency has been used, see figure 3, search frequency 121, and count value 122).

Slovin and Jansen are analogous art since they are from the same field of endeavor of wireless communications connections.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Jansen's technique of counting a finding frequency of the found wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) in Slovin's mobile station (see figure 1, station 10) for wireless connection configurations.

The motivation to combine would have been to have a device, method and computer readable medium that selects an access point based on frequency usage indicating how frequently the corresponding frequency has been used (see paragraph 17, lines 6-9, Jansen), along with access points radio signal strength, quality of service and time stamps.

Slovin discloses an access point selector (figure 1, block 150) and a storing unit which stores specific characters representing identification information of the found wireless relay apparatus (see column 5, lines 30-42, access point table stored in memory and figure 1, block 60) and Jansen discloses a mobile device with a display unit (see figures 1 and 2, man machine interface 45, display 44) which is in accordance with counted finding frequency (see paragraph 17, lines 1-11, searching for an available

frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) and a storing unit (see paragraph 53, lines 4-7, memory for storing data and program instructions).

Slovin and Jansen do not expressly disclose storing specific image data indicating characters representing identification information of the found wireless relay apparatus and displaying one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form.

Chavez, Jr. et al. discloses storing specific image data indicating characters representing identification information (see figure 5, base station selection, 501,502,503,504) of the found wireless relay apparatus (see figure 2, wireless terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) and displaying one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form (see figure 5, base station selection, 501,502,503,504, column 4, lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength).

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Slovin, Jansen, and Chavez, Jr. are analogous art since they are from the same field of endeavor of wireless communications connection configurations.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use Chavez, Jr. et al.'s teaching of storing specific image data indicating characters representing identification information (see figure 5, base station selection, 501,502,503,504) of the found wireless relay apparatus (see figure 2, wireless terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) and displaying one of characters indicated by the image data stored in the storing unit and representing a character of the identification information of the wireless relay apparatus detected by the detector in a display form (see figure 5, base station selection, 501,502,503,504, column 4, lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength) in Jansen's technique of a counting a finding frequency of the found wireless relay apparatus (see paragraph 17, lines 1-11, searching for an available frequency using a limited number of search frequencies and then counting the number of times the corresponding frequency has been used, see figure 3, search frequency 121, and count value 122) and displaying (see figures 1 and 2, man machine interface 45, display 44) in Slovin's mobile station (see figure 1, station 10) having an access point selector (figure 1, block 150) and storing specific characters representing identification information of the found wireless relay apparatus (see column 5, lines 30-

42, access point table stored in memory and figure 1, block 60) for wireless connection configurations.

The motivation to combine would have been to have a device, method and computer readable medium wherein a user has full control over the mobility operational parameters and be able to specify these parameters (see column 2, lines 10-12, Chavez).

As per claim 11, Chavez JR discloses storing specific image data indicating characters (see figure 2, wireless terminal 106 and column 3, lines 34-38, display 202 is used to display information to the user and for the user to indicate functions or data to be used by wireless terminal 106, the user indicates the function or data by selecting icons on display by moving a cursor to the desired icon) corresponding identification information of the wireless relay apparatuses (column 4, lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength).

As per claim 12, Chavez JR discloses displaying selectable information in accordance with the identification information characterized according to identification information on the found wireless relay apparatus, and sets connection environment using the wireless relay apparatus found by the finding unit when the corresponding information is selected (see figure 2, wireless terminal 106, column 4, lines 56-66, the wireless terminal is responsive to the activation of button 208 to determine the four base stations having the strongest signal strength)).

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form 892.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH RIYAMI whose telephone number is (571)270-3119. The examiner can normally be reached on Monday through Thursday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Aung S. Moe/ Supervisory Patent Examiner, Art Unit 2416 /Abdullah Riyami/ Examiner, Art Unit 2416